



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/670,949

09/25/2003

Kai-Chieh Liang

SLA1325

2056

7590  
Gerald W. Maliszewski  
P.O. Box 270829  
San Diego, CA 92198-2829

01/05/2009

EXAMINER

LUONG, ALAN H

ART UNIT

PAPER NUMBER

2427

MAIL DATE

DELIVERY MODE

01/05/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

---

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/670,949  
Filing Date: September 25, 2003  
Appellant(s): LIANG, KAI-CHIEH

---

Gerald Maliszewski  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 10/07/2008 appealing from the Office action mailed 07/11/2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

20020124263	YOKOMIZO	12-2001
6377309	Ito et al.	01-2000

Herpel, Carsten "Elementary Stream Management in MPEG-4" IEEE, vol. 9, No. 2  
[March, 1999]

### **(9) Grounds of Rejection**

1. Claims **1, 6-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (Hereafter, APA), US Pub. 2005/0081143 by Kai-Chieh Liang ; in view of Carsten Herpel (hereafter, Herpel), "Elementary Stream Management in MPEG-4" published in IEEE, March 1999; further in view of European Patent Application No. EP 1045564 A1 published by WAKI et al..

**Regarding to claim 1:** Fig. 1 of APA illustrates "a uniform resource indicator (URI) pointer method for the retrieving Moving Picture Experts Group 4 (MPEG-4) data pointers in a Moving Picture Experts Group 2 (MPEG-2) transport stream (TS) (**APA, ¶0015**), the method comprising: "MPEG-4 resources" consist of [IOD], which contains ES Descriptors for BIFS scene , Object descriptor streams, etc." received from an MPEG-2 TS embedded with MPEG-4 resources organized in Object Carousel (OC) transport protocol [DSM-CC User-User]" (**APA, ¶0006 to ¶0015**); and conventional retrieving MPEG-4 resources (as [BIFS] stream or scene and Object Descriptor stream). Moreover; ES\_Descriptor which contains "a URI in the TS using a local identifier (lid) retrieved from the MPEG-2 TS", [the Object Descriptor Stream] and compose the BIFS scene using the retrieved BIFS stream, (**¶0016 to ¶0025**). However, APA is deficient with "retrieving MPEG-4 resources from the MPEG-2 TS using lid URIs to provide a

Art Unit: 2427

binding name and access scheme to the objects in the OC; and decoding the MPEG-4 resources.”

In an analogous art directed toward a similar problem namely improving the results from retrieving MPEG-4 resources from the MPEG-2 Transport Stream. Herpel teaches encapsulating “MPEG-4 streams in the Moving Picture Coding Expert Group 2 (MPEG-2) transport stream” by FlexMux Stream Encapsulation wherein the FlexMux Stream can be mapped to a MPEG-2 PID in DSM-CC of MPEG-2 protocol that identifies “MPEG-4 resources in response to accessing the address of URL” (**Section IV-C:Transport in MPEG-2 TS, 2 and 3, pages 321 to 322** ) and Fig. 6 of Herpel illustrates a system decoder to “decode the MPEG-4 resources” (**Section III\_A The System Decoder Model, page 319 to 320**). Finally, Herpel teaches “access MPEG-4 content scheme to the objects in the OC” (**Section V: Accessing MPEG-4, page 323-324**) It would have been obvious to one of ordinary skill in the art at the time the invention of the application was made to modify a method of transport conventional MPEG-4 in MPEG-2 TS of APA with the MPEG-4 system decoder model as taught by Herpel; in order to develop the transport encapsulation MPEG-4 streams in the MPEG-2 Transport Stream in real-time digital broadcast.

However, APA and Herpel fail to teach “using lid URIs provide a binding name and access scheme to the objects in the OC”

In an analogous art directed toward a similar problem namely improving the results from using lid URIs provide a binding name and access scheme to the objects in the OC”. Waki, the same endeavor, teaches in Object Carousel system includes using

Art Unit: 2427

an Object Carousel transport protocol (**Waki, ¶0006- ¶0010**); and Fig. 31 of Waki shows Object Locations as "using lid URIs" [identifier IOR]( **¶0017- ¶0019**) "to provide a binding name and access scheme to the objects in the OC "(**Figs. 4, 5, 21, 22, 28, ¶0132, ¶0136 - ¶0141**). It would have been obvious to one of ordinary skill in the art at the time the invention of the application was made to modify a method of transport conventional MPEG-4 in MPEG-2 TS of APA and the MPEG-4 system decoder model as taught by Herpel with the Object carousel transmission method as taught by Waki, in order to provide a binding name and access scheme to the objects in the Object Carousel.

**Regarding to claim 6:** The method of claim 1; APA, Herpel and Waki teach wherein using lid URIs to provide a binding name and access scheme to the objects in the OC; APA also teaches "using a lid URI embedded in an Initial Object Descriptor (IOD) to locate resources in the OC selected from the group including a Binary Format for Scenes (BIFS) scene description stream and an object descriptor stream" (**¶0016 to ¶0020**).

**Regarding to claims 7, 8:** In the method of claim 1 above, Waki also teaches wherein using an Object Carousel transport protocol (**Waki, ¶0008 - ¶0010**) includes forming a hierarchical directory structure including a root directory, sub-directories, files, and streams.(**Figs. 28, 29 and ¶0013, ¶0023-¶0045**).

**Regarding to claim 9:** In the method of claim 1 above, Fig. 1 of APA illustrates " an MPEG-2 TS includes initial object descriptor IOD which contains ES\_Descriptor 1

Art Unit: 2427

as “a first MPEG-2 TS” and ES\_Descriptor 2 as” a second MPEG-2 TS; “wherein locating a URI in the TS” [ES-ID 1 or URL] for BIFS scene;” includes retrieving a lid URI in the first MPEG-2 TS embedded with Moving Picture Coding Expert Group 4 (MPEG-4) resources”[BIFS scene], and, wherein retrieving MPEG-4 resources [Audio source] in response to accessing the lid URI [OD-ID6] includes retrieving MPEG-4 resources [OD 6] from the second MPEG-2 TS [Object Descriptor stream] respectively; “wherein locating a URI includes using lid URIs retrieved from the MPEG-2 TS” [ES-ID 1 or URL] for BIFS scene descriptor stream and [ES-ID 2 or URL] for Object descriptor stream, (see **APA** , ¶0003-¶0025)

**Regarding to claim 10:** APA and Herpel teach the retrieving MPEG-4 resources in response to accessing the address as claim 1 above; APA also teach Moving Picture Coding Expert Group 4 (MPEG-4) resources selected from the group including audio, video, and systems data. (MPEG-4 contents consist of an initial object descriptor and a variable number of streams, such as object descriptor stream, scene description streams, audio streams, video streams, IPMP streams, etc. (**See APA**, ¶0007).

**Regarding to claim 11:** In the claim 1, Herpel teaches “decoding the MPEG-4 resources” but is silent with “an action selected from the group including enhancing audio data in the MPEG-2 TS, enhancing video data in the MPEG-2 TS; and using the systems data to establish an interactive audiovisual scene”. However, APA also teaches “including enhancing audio data in the MPEG-2 TS, enhancing video data in the MPEG-2 TS; and using the systems data to establish an interactive audiovisual scene”;

MPEG-4 provides better compression efficiency than MPEG-2 and new features such as audiovisual interactivities and communication link.(See APA, ¶0005).

**Regarding to claims 12 and 13:** Claims 12, 13 are rejected under the same rational set forth above to claims 7 and 8.

**Regarding to claim 14:** Claim 14 is rejected under the same rational set forth above to claim 11.

2. Claims **15, 20-39** are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (Hereafter, APA); Carsten Herpel (hereafter, Herpel), “Elementary Stream Management in MPEG-4” published in IEEE, March 1999; and EP 1045564 A1 published by WAKI et al.; in view of US 2002/0124263 by Yoshikazu Yokomizo (hereafter, Yokomizo)

**Regarding to claim 15:** Fig. 1 of APA illustrates “a conventional uniform resource indicator (URI) pointer method for broadcasting pointers to Moving Picture Experts Group 4 (MPEG-4) data in Moving Picture Experts Group 2 (MPEG-2) transport stream (TS), the method comprises embedding MPEG-4 resources in the MPEG-2 TS, organized in an Object Carousel (OC) transport protocol “, Herpel also teaches “generating a local identifier (lid) URI for accessing MPEG-4 resources, and finally Waki further teaches” using the lid URIs to provide a binding name and access scheme to the objects in the OC” (see claim 1 rejection).

However, APA, Herpel and Waki are silent with” embedding the URI in an MPEG-2 TS; and broadcasting the MPEG-2 TS”.



In an analogous art directed toward a similar problem namely improving the results from embedding the URI in an MPEG-2 TS; and broadcasting the MPEG-2 TS.

Fig. 1 of Yokomizo illustrates the interactive DTV broadcast system that the object descriptor can be designated by BIFS (MPEG-4 profile) and the object can be transmitted as the object descriptor ID by “embedding the URI in an MPEG-2 TS for transporting MPEG-4 data in an MPEG-2 transport stream (TS) in “broadcast MPEG-2 TS” as Digital broadcast signal. (**FIG. 1, ¶0030-¶0034**). It would have been obvious to one of ordinary skill in the art at the time the invention of the application was made to modify the URL pointer method of APA, Herpel and Waki with embedding the URI in an MPEG-2 TS as taught by Yokomozo’s in order to transport MPEG-4 contents in the MPEG-2 Transport Stream in Digital broadcast signal.

**Regarding to claim 20:** The method of claim 15, Waki also teaches in Object Carousel system includes using an Object Carousel transport protocol; wherein using lid URIs to provide a binding name and access scheme to the objects in the OC (**Figs. 4, 5, 21, 22, 28, ¶0132, ¶0136 to ¶0141**).

**Regarding to claims 21, 22:** The method of claim 15, Waki further teaches wherein using an Object Carousel transport protocol (¶0008 - ¶0010) includes forming a hierarchical directory structure including a root directory, sub-directories, files, and streams. (**Figs. 28, 29 and ¶0013, ¶0023-¶0045**).

**Regarding to claim 23:** Claim 23 is rejected as combination of claims 9 and 15.

**Regarding to claim 24:** In claim 15 above, APA also teaches MPEG-4 content including audio, video, and systems data. (MPEG-4 contents consist of an initial object descriptor and a variable number of streams, such as object descriptor stream, scene description streams, audio streams, video streams, IPMP streams, etc. (**see APA, ¶0007**).

**Regarding to claim 25:** In the retrieving MPEG-4 resources in claim 15 above, Yokomizo also teaches “wherein decoding the MPEG-4 resources includes an action selected from the group including enhancing audio data in the MPEG-2 TS, enhancing video data in the MPEG-2 TS; (**Yokomizo, ¶0031**) and Fig. 1 of Yokomizo illustrates a communication link (**Yokomizo, ¶0030**). Additionally, APA also teaches” the systems data to establish an interactive audiovisual scene “(**APA, ¶0005**),

**Regarding to claim 26:** Claim 26 is rejected under the same rational set forth above to claim 1.

**Regarding to claim 31:** Claim 31 is rejected under the same rational set forth above to claim 6.

**Regarding to claims 32, 33:** Claims 32, 33 are rejected under the same rational set forth above to claims 7 and 8.

**Regarding to claim 34:** Claim 34 is rejected under the same rational set forth above to claim 9.

**Regarding to claim 35:** Claims 35 is rejected under the same rational set forth above to claim 10.

**Regarding to claim 36:** Claim 36 is rejected under the same rational set forth above to claim 11.

**Regarding to claims 37, 38:** The system of claim 26, Waki discloses “a cache mechanism for storing” the data from reception apparatus receives a file system having “the OC hierarchical directory” (**¶0010, ¶0031 to ¶0042, ¶0046 and FIG. 34**).

**Regarding to claim 39:** Fig. 8A of Yokomizo shows “the transmitter [107] in the iSTB (4 of Fig. 1) in the Interactive Digital TV communication link (FIG. 1) for transmitting MPEG-4 BIFS along with MPEG-2 transport stream and FIG. 9A shows a receiver structure in order to receive MPEG-2 (containing MPEG-4 streams) digital broadcast signal and decode MPEG-4 systems data in MPEG-4 decoder (207 of FIG. 9A)(see **Figs. 1, 8A, 9A and ¶0030-¶0034, ¶0115, ¶0119, ¶0120**).

3. Claims **40, 46-50** are rejected under 35 U.S.C. 103(a) as being unpatentable over APA and US Pub. No. 2002/0124263 A1 published by Yokomizo, in view of US Patent No. 6,377,309 B1 issued to Masamichi Ito et al.(Hereafter Ito)

**Regarding to claim 40** APA discloses the conventional MPEG-4 resources in a MPEG-2 TS using an Object Carousal (OC) transport protocol (see discussion in claim 1). Figs. 8A, 8B of Yokomizo illustrates an MPEG-4 broadcaster [1 of Fig. 1] contains a uniform resource identifier (URI) pointer system (General Database contains URL addresses) [106] generating a local identifier (lid) URI for accessing the MPEG-4

Art Unit: 2427

resources {BIFS} from Web servers for supplying data information in the MPEG-2 TS using lid URIs to provide a binding name and access scheme [in 106] to the objects in the OC, Database [106] holds URL of Web servers as “an address pointer unit having an interface” data base [105] to supply an MPEG-2 TS with URIs ”to accept the encoded MPEG-4 resources [BIFS], the address pointer embedding the encoded MPEG-4 resources in a MPEG-2 TS using an Object Carousel (OC) transport protocol.

**(see Yokomizo, ¶0115 - ¶0117)** and Set top box [4 of Fig. 1] includes “a transmitter [107] having an interface (designation unit), [103] as a mouse or keyboard “to accept the MPEG-2 TS” inputs from the address pointer unit (Data Base [106]) and to broadcast the MPEG-2 TS (MPEG-2 TS with BIFS outputs the data via an antenna to satellite. **(FIG. 8A and ¶0115).**

However, Yokomizo reference is silent with “an encoder having an interface to accept MPEG-4 information and to supply encoded MPEG-4 resources-

In an analogous art directed toward a similar problem namely improving the results from the MPEG-4 encoder. Fig. 2 of Ito illustrates “an encoder system includes encoders [5001, 5002, 5003, 5004 and 5005] which have an interface to accept MPEG-4 information” from sound, photo image, synthetic image, character and scene configuration information, respectively. The encoded object information and scene description information undergo an encode process to an MPEG4 bit stream by a data multiplexer [5006] ”to supply encoded MPEG-4 resources” **(see Ito, col. 3 line 41-51)** It would have been obvious to one of ordinary skill in the art at the time the invention of the application was made to modify the APA and method of Yokomizo including the

Art Unit: 2427

MPEG-4 encoding process as taught by Ito, in order to provide the method of reproducing MPEG-4 data from MPEG-2 TS in digital TV broadcast.

**Regarding to claim 45:** In the system of claim 40, Fig. 1 of APA illustrates discloses the address pointer unit uses a lid URI embedded in an Initial Object Descriptor (IOD) to locate resources in the OC selected from the group including a BIFS scene description stream and an object descriptor stream (**APA, ¶0016-¶0025**).

**Regarding to claims 46, 47:** The method of claim 40 above, Fig. 21 of Ito illustrates "the address pointer unit forms an OC system and OC transport protocol hierarchical directory structure including a root directory(MPEG-2 TS stream), sub-directories (transport packet), files (Adaptation field), and streams (MPEG-4) (**see FIG. 21,col.16 line 60 to col. 17 line 33**). It would have been obvious to one of ordinary skill in the art at the time the invention of the application was made to combine the Object carousel transport protocol as taught by Waki into the method of Yokomizo, in order to provide hierarchical directory structure in the Object Carousel transmission method.

**Regarding to claim 48:** In the system of claim 40 above, Fig. 21 of Ito shows "the address pointer unit forms a lid URI in a first MPEG-2 TS (PID) and embeds MPEG-4 resources in a second MPEG-2 TS (Objects A, B, C...) and, wherein the transmitter broadcasts the first and second MPEG-2 TSs (**see Ito, col.16 line 60 to col. 17 line 33**).

**Regarding to claim 49:** In the system of claim 40, Ito further teaches the MPEG-4 resources selected from the group including audio, video, and systems data. (Ito, **col. 3 line 64 to col. 4 line 28**).

**Regarding to claim 50:** Yokomizo discloses systems data for the establishment of an interactive audiovisual scene and communication link in claim 40 above (**FIG. 1, ¶0030-¶0034**). Ito also teaches the Object Coding method (**col. 4 line 29 to col. 5 line 12**); Figs. 20 and 21 of Ito illustrate enhanced MPEG-4 audio data in the MPEG-2 TS (object C) and enhanced MPEG-4 video data in the MPEG-2 TS (Objects A and B) (**see Figs. 20, 21 col. 16 line 47 to col. 17 line 33**).

#### **(10) Response to Argument**

The Appellant respectfully traverses the rejections at least based on the following remarks.

**I. The rejection of claims 1 and 6-14 under 35 U.S.C. 103(a) as unpatentable with respect to Admitted Prior Art (APA) in view of Herpel, "Elementary Stream Management in MPEG-4, IEEE, March 1999 ("Herpel") and Waki et al. ("Waki" EP 1045564).**

**A. Independent Claim 1:** The Appellant first turns to the rejection of claim 1 as being unpatentable over APA, Herpel; in view of Waki et al.

Appellant respectfully noted that, there are only 2 MPEG-4 addressing schemes: ES-ID and URL. Herpel does not disclose a method of using lid URIs to provide a binding

Art Unit: 2427

name and access scheme to objects in the OC. In fact, Herpel appears to be describing an ES-ID system, and Herpel's "regular repeating" method points away from the recited use of lid URIs to locate resources. Alternately stated, although Herpel states that MPEG-4 data can be carried in a DSM-CC OC, he provides no linkage between the IOD needed in an MPEG-4 system for encoding/decoding, and the DSM-CC OC. In the claimed invention, the lid URI provides a linkage between the MPEG-4 and MPEG-2 (DSM-CC) systems (Appeal Brief, page-12). Examiner respectfully disagrees.

Appellant does not point out an evidence to establish that "there are **only 2** MPEG-4 addressing schemes: ES-ID and URL" (emphasis added). In fact, MPEG-4 may be addressed by using ATM, RTP. Even if this "only" were true, there is no evidence that one of ordinary skill in the art would be dissuaded from the proposed modification in that there is no explicit teaching away.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F. 2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F. 2d 1091, 231 USPQ 375 (Fed. Cir.1986). In this case, Herpel teaches encapsulating "MPEG-4 streams in the MPEG-2 transport stream" by FlexMux Stream Encapsulation wherein **the FlexMux Stream can be mapped to a MPEG-2 PID in DSM-CC of MPEG-2 protocol that identifies "MPEG-4 resources in response to accessing the address of URL" (Section IV-C:Transport in MPEG-2 TS, 2 and 3, pages 321 to 322 )** to be obvious to prove that: there is a link between local device contains Object MPEG-4 resource address (i.e. lid ) and URL

Art Unit: 2427

address by the MPEG-2 conversion protocol. Addition, Waki, the same endeavor, in that, Waki's system is implemented in MPEG, teaches in Object Carousel system includes using an Object Carousel transport protocol (**Waki, ¶0006- ¶0010**); and Fig. 31 of Waki shows **Object Locations** as "using **lid URIs**" [identifier IOR]( **¶0017- ¶0019**) "to provide a binding name and access scheme to the objects in the OC "(**Figs. 4, 5, 21, 22, 28, ¶0132, ¶0136 - ¶0141**). In the Examiner's opinion that combination of APA, Herpel and WAKI references teaches "a method of using lid URIs to provide a binding name and access scheme to objects in the OC" Applicant argues that Harpel points away from the recited use of lid URIs to locate resources. As previously noted, the reference is considered to anticipate this limitation and therefore the question of it pointing away is inapplicable. See MPEP 2131.05.

In an analogous art directed toward a similar problem namely improving the results from providing a binding name and access scheme to objects in the OC, it would have been obvious to modify APA with the standard MPEG-4 as taught by Herpel and Object Carousel in MPEG-2 system as taught by Waki; in order to approaches to embed the streaming data in transport and storage infrastructures in MPEG-2 transport stream, and access MPEG-4 content via its descriptive information as binding name and access scheme to objects in the OC.

The Appellant notes that the Cited sections fail to disclose the exact terms or the general concepts of a URI or lid URI. Thus, the cited section necessarily fails to describe using lid URI to provide a binding name and access scheme to objects in an OC. In fact, the Waki reference fails to even mention to term 'MPEG-4', and does not



describe a means of carrying MPEG-4"resources in an MPEG-2 TS. The Waki reference appears to have absolutely no relevance to the claimed invention. (Page -13)  
Examiner respectfully disagrees.

Waki is relied upon to teach using lid URIs to provide a binding name and access scheme to the objects in the OC. As used within the specification a 'lid URI' is construed as "a lid URI may be embedded in an Initial Object Descriptor (IOD) to locate resources in the OC such as a binary format for scenes (BIFS) scene description stream and/or an object descriptor stream" (**see spec. ¶0032**).. . . In Figs. 28, 30, [¶0136] of Waki; the IOR is used similarly in so far as it "The BIOP object references uses the Inter-operable Object Reference (IOR) format defined by the CORBA (Common Object Request Broker Architecture) standard. Each IOR contains a BIOPProfileBody as defined in ISO/IEC 13818-6. It carries all the information pertaining to an object that is needed to uniquely identify the object and locate it within a Service Domain specified by an NSAP address." (**See spec. ¶0063**). Therefore, Waki uses a similar mechanism of lid URIs because it provides a binding name and access scheme to the objects in the directory. When taken in combination with the teachings of APA, it is the examiner's opinion that it would have been obvious to those of ordinary skill in the art to recognize its applicability to providing MPEG-4 resources in an MPEG-2 TS using an OC transport protocol as claimed.

In response to appellant's argument that The Waki reference is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the

Art Unit: 2427

applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Waki was relied upon specifically to teach an Object Carousel transport protocol (Waki, ¶0006- ¶0010); and Fig. 31 of Waki shows Object Locations as "using lid URIs" [identifier IOR]( ¶0017- ¶0019) "to provide a binding name and access scheme to the objects in the OC "(Figs. 4, 5, 21, 22, 28, ¶0132, ¶0136 - ¶0141). It is well-known in the art that MPEG-4 doesn't define a specific transport mechanism. It is expected that an MPEG-2 transport stream, ATM or RTP are appropriate choices. The claim relies on MPEG-2 as transport mechanism for MPEG-4. Waki also references uses the MPEG-2 DSM-CC protocol (¶0006 - ¶0010) and is therefore relevant to claimed invention.

In summary, the Appellant respectfully submits that a *prima facie* case of obvious has not been supported since the combination of the APA, Waki, and Herpel does not explicitly disclose every limitation of claim 1. Neither has a case been supported that the APA can be modified to supply the missing limitations in view of Herpel and Waki, or what was well known by a person of skill at the time of the invention. Examiner respectfully disagrees

An invention is unpatentable if the differences between it and the prior art would have been obvious at the time the invention was made. In the instant case, the examiner has relied upon the use of known techniques to improve similar devices in the same way in order to support the conclusion that it would have been obvious to modify

Art Unit: 2427

the teachings of using conventional MPEG-2 based OC binding techniques (Waki) to a system that employs MPEG-2 TS and OCs to convey MPEG-4 data (APA and Herpel).

It is respectfully submitted that a prima facie case of obviousness has in fact been established and the rejection should be sustained.

### **B. Rejection of Dependent Claims 6-14**

No additional arguments other than those related to the claim being dependent upon a purported allowable claim are presented. Accordingly, the rejection is still believed proper for the reasons previously set forth.

## ***II. The rejection of claims 15 and 20-39 as unpatentable under 35 U.S.C. 103(a) with respect to the APA in view of Herpel and Waki, and further in view of Yokomizo (US 2002/0124263.***

**A. Independent Claim 15 and 26:** Additionally, Appellant states that Yokomizo does not disclose embedding MPEG-4 resources in an MPEG-2 stream using an OC transport protocol, or using lid URIs to provide a binding name and access scheme to the objects in the OC, with respect to claims 15 and 26. (Page 19). Examiner respectfully disagrees.

Figs. 8A, 8B of Yokomizo illustrates an MPEG-4 broadcaster [1 of Fig. 1] contains a uniform resource identifier (URI) pointer system in local device called General Database contains URL addresses [106]; it may be obvious there is a protocol to convert a local identifier (lid) address into URI address (i.e. because different syntax format of lid and URL or IP address in computer language) for accessing the MPEG-4

Art Unit: 2427

resources [BIFS] from Web servers for supplying data information in the MPEG-2 TS; and examiner confirms that the lid address in [106] is NOT Web address as Appellant confused and pointed out in Appeal Brief, (page 19). Above explain using lid URIs to provide a binding name and access scheme in Database [106] to the objects in the OC, Database [106] holds URL of Web servers (i.e. URL after converted by protocol from lid address as discussed above) as "an address pointer unit having an interface" data base [105] to supply information of an MPEG-2 TS associated with URIs (**see Yokomizo, ¶0115 - ¶0117**). Therefore, it is the examiner's opinion that the Yokomizo reference teaches the limitation of "embedding MPEG-4 resources in an MPEG-2 stream using an OC transport protocol, or using lid URIs to provide a binding name and access scheme to the objects in the OC".

It is respectfully submitted that a prima facie case of obviousness has in fact been established and the rejection should be sustained.

#### **B. Rejection of Dependent Claims 20-25 and 31-39**

No additional arguments other than those related to the claim being dependent upon a purported allowable claim are presented. Accordingly, the rejection is still believed proper for the reasons previously set forth.

***III. The rejection of claims 40 and 46-50 as unpatentable under 35 U.S.C. 103(a) with respect to the APA in view of Yokomizo, and further in view of Ito et al. ("Ito, US 6,377,309).***

**A. Independent Claim 40:** Appellant respectfully submits that Ito does not disclose embedding MPEG-4 resources in an MPEG-2 stream using an OC transport protocol, or using lid URIs to provide a binding name and access scheme to the objects in the OC because Yokomizo fails to disclose embedding MPEG-4 resources in an MPEG-2 stream using an OC transport protocol, or using lid URIs to provide a binding name and access scheme to the objects in the OC. Examiner respectfully disagrees.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Yokomizo reference teaches the limitation of "embedding MPEG-4 resources in an MPEG-2 stream using an OC transport protocol, or using lid URIs to provide a binding name and access scheme to the objects in the OC " as discussed above. Addition, Fig. 2 of Ito illustrates "an encoder system includes encoders [5001, 5002, 5003, 5004 and 5005] which have an interface to accept MPEG-4 information" from sound, photo image, synthetic image, character and scene configuration information, respectively. The encoded object information and scene description information undergo an encode process to an MPEG4 bit stream by a data multiplexer [5006]"to supply encoded MPEG-4 resources" (see Ito, col. 3 line 41-51). Therefore, it is respectfully submitted

Art Unit: 2427

that a prima facie case of obviousness has in fact been established and the rejection should be sustained.

**B. Rejection of Dependent Claims 45-50:**

No additional arguments other than those related to the claim being dependent upon a purported allowable claim are presented. Accordingly, the rejection is still believed proper for the reasons previously set forth.

The Examiner's Answer has addressed Appellant's arguments for patent ability. Any further arguments regarding other elements or limitation not specifically argued that the appellant could have made are not being addressed for consideration by the panel. Should the panel find that the examiner's position/arguments or any aspect of the rejection is not sufficiently clear or a particular issue needs further explanation, it is respectfully requested that the case be remanded to the examiner for further explanation prior to the rendering of a decision.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Application/Control Number: 10/670,949

Page 22

Art Unit: 2427

/A. L. /

Examiner, Art Unit 2427

Conferees:

/Andrew Y Koenig/

Andrew Koenig

Supervisory Patent Examiner, Art Unit 2423

/Jason P Salce/

Primary Examiner, Art Unit 2421

For Scott Beliveau, Supervisory Patent Examiner, Art Unit 2423